

Fig. 1 has been amended to correct a typographical error mislabeling 22a and 22b. Fig. 1 is now consistent with the labeling on Figs. 2 and 3 and the paragraphs starting on line 23 of page 7 and ending at line 23 of page 8 of the application as filed. A marked up drawing sheet and a replacement sheet are included at the end of this paper.

REMARKS/ARGUMENTS

Please enter this response to the Final Office Action rather than the response filed February 11, 2008.

Claims 24-34 and 37-39 remain pending in this application. The Examiner rejected claims 24-39 on new grounds, but made the action final. Applicants have amended claims 24, 25, and 38, and have deleted claims 35 and 36 without prejudice or disclaimer. Applicants have amended the specification as requested by the Examiner. Applicants have corrected mislabeled components of Fig. 1 (22a and 22b were reversed). Applicants request consideration and entry of this amendment, and allowance of the pending claims.

Amendment to the Specification

Applicants amend the Cross Reference paragraph to include "now US Patent No. 6,660,147," in response to the Examiner's objection to the specification.

Claims are Patentable under 35 U.S.C. § 112

Applicants have amended claims 24, 25, and 38 to clarify that the one or more chambers are now the first chamber and the second chamber as appropriate. With that amendment, claims 31 and 32 clearly refer to the first and second chambers when the term "said chambers" is used. As the Examiner's concerns have been addressed, Applicants request that the rejection be withdrawn.

Claims are Patentable under 35 U.S.C. § 103(a) over U.S. Pat. No. 4,715,943 in view of U.S. Pat. No. 4,652,354

The Examiner rejected claims 24-30, 33, and 35-38 as allegedly obvious over U.S. Pat. No. 4,715,943 to Place et al. ("943 pat.") in view of U.S. Pat. No. 4,652,354 also to Place et al. ("354 pat."). Applicants traverse the rejections for the reasons herein.

The claimed analytical system recites, among other things, "a substrate" that comprises a central reservoir region, a plurality of electrophoretic channels, and first and second chambers. Neither the '943 pat. and the '354 pat. disclose such a "substrate." They disclose a mould 10 made of a flat lower disc 12 with a central opening 14b and an upper disc 11 with four ridges 13 and a central opening 14a, which has a larger diameter than central opening 14b on the lower disc 12. When assembled, the two discs enclose four radial channels that may be filled with an electrophoretic medium. When in use for electrophoresis, the mould 10 is placed in a cell 40 that has two concentric compartments, circular compartment 40a and annular compartment 40b.

Each of the radial channels is in fluid communication with the circular compartment 40a and the annular compartment 40b. It is the presence of the central opening 14a in the mould 10 and the liquid level of the buffer electrolyte in compartment 40a that permits the buffer electrolyte to be in contact with the electrophoretic medium. The combination of the cell 40 and the mould 10 provides a central reservoir region, electrophoretic channels, and a single, annular chamber in fluid communication with the distal ends of each the electrophoretic channels. Such an assembly is not a "substrate," nor does the assembly have each and every element of claim 24 as amended. One of ordinary skill in the art would not be motivated to invent the claimed invention without Applicants' present application. Applicants request reconsideration and withdrawal of the rejection and allowance of claim 24.

Claims 25-30, 33, 37, and 38 depend directly or indirectly from claim 24 and are patentable for at least the same reasons. Applicants respectfully request withdrawal of the rejections and allowance of the claims.

Claims are Patentable under 35 U.S.C. § 103(a) over U.S. Pat. No. 4,715,943 in view of U.S. Pat. No. 4,652,354 in further view of U.S. 4,973,168 to Chan

The Examiner rejected claims 31 and 32 as allegedly unpatentable over the '943 patent in view of the '354 patent in further view of Chan. Applicants respectfully submit that Chan does not remedy the deficiencies of the '943 patent and the '354 patent, in that it does not teach a "substrate" having the element as recited in claim 24 as amended. Applicants respectfully request withdrawal of the rejections and allowance of the claims.

Claim is Patentable under 35 U.S.C. § 103(a) over U.S. Pat. No. 4,715,943 in view of U.S. Pat. No. 4,652,354 in further view of U.S. 6,319,469 to Mian et al.

The Examiner rejected claim 34 as allegedly unpatentable over the '943 patent in view of the '354 patent in further view of Mian et al. Applicants respectfully submit that Mian et al. does not remedy the deficiencies of the '943 patent and the '354 patent, in that it does not teach a substrate having each and every element as recited in claim 24 as amended. Applicants respectfully request withdrawal of the rejection and allowance of the claim.

Claim is Patentable under 35 U.S.C. § 103(a) over U.S. Pat. No. 4,715,943 in view of U.S. Pat. No. 4,652,354 in further view of U.S. 5,313,129 to Stewart.

The Examiner rejected claim 39 as allegedly unpatentable over the '943 patent in view of the '354 patent in further view of Stewart. Applicants respectfully submit that Stewart does not remedy the deficiencies of the '943 patent and the '354 patent, in that it does not teach a

Appl. No. 10/731,420

Reply to Office Action of Oct. 11, 2007

Response dated April 11, 2008

substrate having each and every element as recited in claim 24 as amended. Applicants respectfully request withdrawal of the rejection and allowance of the claim.

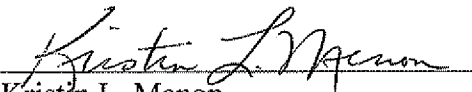
Applicants request reconsideration of the pending claims in view of the foregoing amendments and remarks.

FEE AUTHORIZATION and REQUEST FOR TIME EXTENSION

A Petition for a 3-Month Extension of Time is requested herewith. If any additional time extensions are required, such time extensions are hereby requested. If any additional fees not submitted with this response are required, please take such fees from Applied Biosystems Deposit Account No. **01-2213 (Order No. 4320 C1)**.

Respectfully submitted,

Date: April 11, 2008



Kristin L. Menon

Attorney for Applicants

Reg. No. 56,869

Telephone: 650-554-2944

Customer No.: 22896

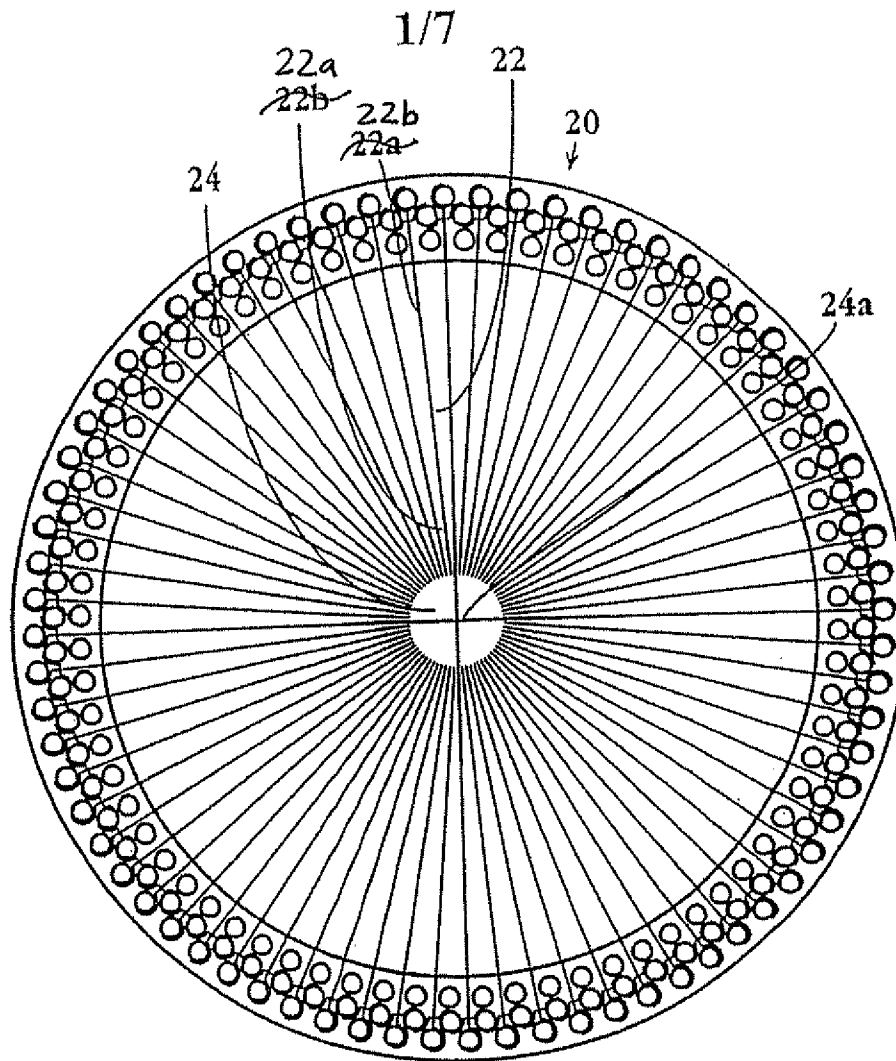


Fig. 1

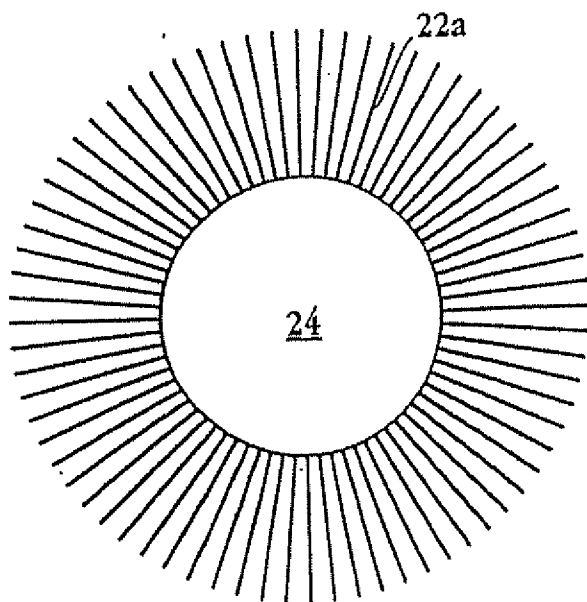


Fig. 2

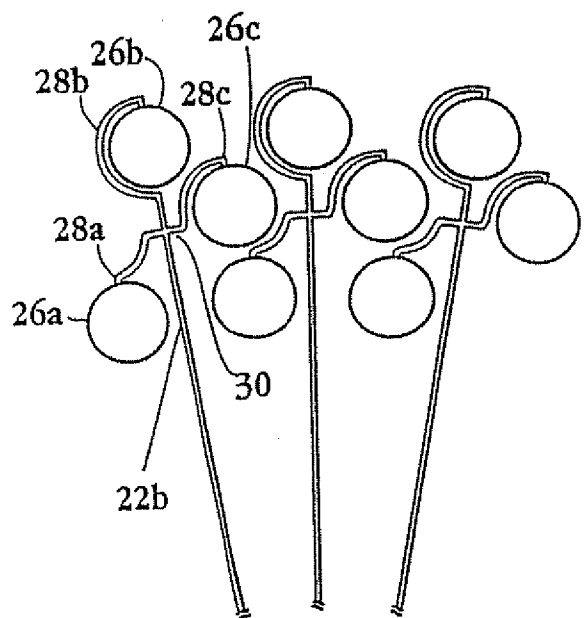


Fig. 3